

**Florence Township Trustees
Special Meeting Minutes
RE: Wind Turbines, Article 23
Dec. 16th, 2009, 9am**

The Florence Township Trustees held a special meeting regarding proposed changes to Article 23, Wind Turbines. The meeting was held at the Florence Township Office complex. It is located at 11011 Chapel St., Birmingham, Ohio. The following trustees were present:

Orville Sayler
John Krumwiede
Ray "Skip" Halliwell

The meeting began with the clerk reading the proposed changes recommended by the Florence Township Zoning Commission. They include replacing the word "conditions" with "requirements" as well as rewording the Noise Level section I. E.

After the reading of the proposed changes it was opened for public discussion. After some discussion –

MOTION: Skip makes the motion and it is seconded by Orville to adopt the following:

1. Replace the word "conditions" with "requirements".
2. Repword Noise Level section I. E to read as follows:
Noise Level: The noise level of the turbine shall not exceed sixty (60) decibels (i.e. a person talking in a normal tone of voice) at the nearest neighboring property line. This information shall be included in the required engineering report and shall be obtained from the manufacturer of the wind turbine. If there is a complaint about noise, the wind turbine owner is required to submit within 30 days a current decibel reading report signed by an authorized source. Those turbines not meeting this requirement will be issued a zoning violation and be required to shut down immediately until the required decibel levels are met.
3. To remove the sentence "The maintenance records must be kept and available for inspection." In section I.D. Title Maintenance.
4. To remove "A maintenance schedule as well as" in section III. Permits #6 and add "Installation, maintenance and dismantling per manufacturer's instruction."

Resolution 2009-30

The entire Article will read as follows:

Amendment to the Florence Township Zoning Resolution

Section Purpose

The purpose of this amendment is to establish standards for the location and installation of wind turbine generators in Florence Township, Erie County, Ohio. This amendment is consistent with the stated primary purpose of the Florence Township Zoning Resolution: "Protecting the health, safety, comfort and general welfare" of Florence Township residents. The Township also recognizes the need to protect the scenic beauty of the Township from unnecessary and unreasonable visual interference, noise radiation and that wind turbine generators may have negative health, safety, welfare and aesthetic impacts upon adjoining and neighboring uses. As such, this amendment seeks to:

1. Protect residential and agricultural areas from potential adverse impact of wind turbine generators;
2. Permit wind turbine generators in selected areas by on-site residential, commercial or industrial users subject to the terms, conditions and provisions hereof;
3. Ensure the public health, welfare and safety of the Township's residents in connection with wind turbine generators; and
4. Avoid potential damage to real and personal property from the wind turbine generators or the failure of such structures and related operations.

ARTICLE 23 - WIND TURBINES

Florence Township recognizes the importance of clean, sustainable and renewable energy sources. To that end, Florence Township permits the installation and use of residential wind turbines under the following regulations to ensure that the safety and welfare of all township residents is met.

Wind Turbine Generator (Windmill)– Low Impact Wind Powered Electric Generator:

A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics which has a rated capacity of not more than 100 kw and which is intended to primarily reduce on-site consumption of utility power.

Windmill, low impact wind powered electric generator subject to the following requirements:

- a. The proposed wind powered electric generator/windmill shall be a distance of at least 150% of the height of the total structure to any property line, off-site residence or building, and public or private road right-of-way.
- b. The maximum height of any turbine shall be one hundred (100) feet. For purposes of this particular zoning item, maximum height shall be considered the total height of the turbine system including the tower and the maximum vertical height of the turbine blades. Maximum height therefore shall be calculated by measuring the length of a prop at maximum vertical rotation to the base of the tower.
- c. The maximum lighting used for or on the structure is a low intensity red light as defined by the Federal Aviation Administration.
- d. The wind powered electric generator/windmill shall have a rated capacity of not more than 100 kw.
- e. The wind powered electric generator/windmill shall service only the site on which it is built.
- f. All necessary township and county permits shall be obtained.

Wind Turbine Generator (Windmill)– High Impact Wind Powered Electric Generator:

A wind energy conversion system consisting of a wind turbine, a tower and associated control or conversion electronics, which has a rated capacity greater than 100 kw but less than 50 mw.

Windmill, high impact wind powered electric generator subject to the following requirements:

- a. The proposed wind powered electric generator/windmill shall be a distance of at least 150% of the height of the total structure to any property line, off-site residence or building, and public or private road right-of-way.
- b. The maximum lighting used for or on the structure shall be the minimum as defined by the Federal Aviation Administration.
- c. The wind powered electric generator/windmill shall have a rated capacity of more than 100 kw.
- d. All necessary township and county permits shall be obtained.

I. **High and low impact wind turbines** shall be a *permitted use* in all districts under the following requirements:

- A. **Height:** The maximum height of any turbine shall be one hundred (100) feet. For purposes of this particular zoning item, maximum height shall be considered the total height of the turbine system including the tower and the maximum vertical height of the turbine blades. Maximum height therefore shall be calculated by measuring the length of a prop at maximum vertical rotation to the base of the tower.
- B. **Setbacks:** The following shall apply in regard to setbacks:

Any turbine erected on a parcel of land shall establish a “clear fall zone” from all neighboring property lines and structures. The clear fall zone shall not be less than 150% of the maximum turbine height as measured on a radius from the base of the turbine tower. A turbine shall be erected and placed in such a manner that, if it were to fall, whatever direction the fall occurs would be contained solely on the property where the turbine is located.
- C. **Aesthetics:** The following provisions shall be applied to the aesthetics issue of wind turbines:
The turbine including prop blades, turbine cowling and tower shall be painted or coated white, gray or sky blue. Logos or other identification markers, other than those of the manufacturer shall not be permitted anywhere on the turbine.
- D. **Maintenance:** Wind turbines must be maintained in good working order. Manufacturer’s records for preventative maintenance shall apply. Turbines that become inoperable for more than nine (9) months must be removed by the owner within sixty (60) days of issuance of zoning violation. Removal includes removal of all apparatus, supports and/or other hardware associated with the existing turbine.
- E. **Noise Level:** The noise level of the turbine shall not exceed sixty (60) decibels (i.e. a person talking in a normal tone of voice) at the nearest neighboring property line. This information shall be included in the required engineering report and shall be obtained from the manufacturer of the wind turbine. If there is a complaint about noise, the wind turbine owner is required to submit within 30 days a current decibel reading report signed by an authorized source. Those turbines not meeting this requirement will be issued a zoning violation and be required to shut down immediately until the required decibel levels are met.

F. **Capacity:** The capacity shall be determined by the manufacturer's rating.

II. **Definitions:** For purposes of regulation of residential, commercial and individual use of wind turbine generators.

Accessory Structures: Structures such as sheds, storage sheds, pool houses, unattached garages and barns.

Anemometer: An instrument that measures the force and direction of the wind.

Clear Fall Zone: Means an area surrounding the wind turbine unit into which the turbine and/or turbine components might fall due to inclement weather, poor maintenance, faulty construction methods, or any other condition causing turbine failure that shall remain unobstructed and confined within the property lines of the primary parcel where the turbine is located; the purpose being that if the turbine should fall or otherwise become damaged, the falling structure will be confined to the primary parcel.

Cowling: A streamlined removable metal that covers the turbine's nacelles.

Nacelle: A separate streamlined metal enclosure that covers the essential mechanical components of the turbine.

Primary Structure: For each property, the structure that one or more persons occupy the majority of time on that property for either business or personal reasons. Primary structures such as residences, commercial buildings, hospitals and day care facilities. Primary structures exclude structures such as hunting sheds, storage sheds, pool houses, unattached garages and barns.

Professional Engineer: A qualified individual, who is licensed as a Professional Engineer in the State of Ohio.

Wind Turbine Generator (Windmill): A machine which runs on the energy generated by a wheel of adjustable blades or slats rotated by the wind.

Wind Turbine Owner: The person or a person who owns the Wind Turbine structure.

Wind Turbine Tower: The support structure to which the turbine and rotor are attached.

Wind Turbine Tower Height: The distance from the rotor blade at its highest point to the top surface of the Wind Power Generating Facility (WPGF) foundation.

III. **Permits:**

- A. A zoning permit shall be required before construction can commence on an individual wind turbine system.
- B. Applicant shall provide the Township Zoning Inspector with the following items and/or information when applying for the permit:
 1. Location of all public and private airports in relation to the location of the turbine, as well as any FAA restrictions that may be applicable to the turbine installation.
 2. An engineering report that shows:
 - a. The total size and height of the unit.
 - b. The total size and depth of the unit's concrete mounting pad.
 - c. An average decibel rating for the proposed turbine unit.
 - d. A list and/or depiction of all safety measures that will be on the unit including anti-climb devices.
 - e. Data specifying the kilowatt size and generating capacity of the proposed unit.
 - f. Applicant shall provide the zoning inspector with a stamped inspection form that certifies that the tower will be installed according to sound engineering practices.
 3. A site drawing showing the location of the unit in relation to existing structures on the property, roads and other public right of ways and neighboring properties.
 4. Evidence of a "clear fall zone" with manufacturer's recommendation must be attached to the required engineering report.
 5. Color of the unit as well as the location and size of the manufacturer's identifying logos shall be included in the plan.
 6. A dismantling plan that outlines how the unit will be dismantled shall be required as part of the permit application. Installation, maintenance and dismantling shall be as per manufacturer's instruction.

Roll Call: all 'ayes. Motion passes. Orville makes the motion to adjourn. It is seconded by John. Roll call: all 'ayes. Meeting adjourned.